UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 2
290 BROADWAY
NEW YORK, NY 10007-1866

AUG 2 6 2013

CERTIFIED MAIL-RETURN RECEIPT REQUESTED
Article Number: 7005 3110 0000 5952 7832

Kelly Love, Administrator
West Milford Municipal Utilities Authority
179 Cahill Cross Road, Suite 221
West Milford, NJ 07480

Dear Ms. Love:

On June 3-5, 2013, the United States Environmental Protection Agency (EPA) and the New Jersey Department of Environmental Protection (NJDEP) conducted Sanitary Surveys at four (4) West Milford Municipal Utilities Authority (WMMUA) public water systems: Greenbrook Estates, Bald Eagle Village, Awosting and Parkway. On June 24-25, 2013, Sanitary Surveys were conducted at the three (3) remaining WMMUA public water systems: Birch Hill Park, Crescent Park, and Olde Milford Estates. The objective of a Sanitary Survey is to evaluate and document the capabilities of the water system's sources, treatment, storage, distribution network, operation and maintenance, and overall management to continually provide safe drinking water and to identify any deficiencies that may adversely impact a public water system's ability to provide a safe, reliable water supply.

Enclosed are summaries of the observations and findings made during the on-site inspections and significant deficiencies identified for each of the seven (7) WMMUA public water systems. Within forty five (45) days from the receipt of this letter, please submit to EPA and NJDEP the information requested.

All information shall be mailed to:

Richard Paull, Manager
Bureau of Water Compliance and Enforcement-Northern
New Jersey Department of Environmental Protection
7 Ridgedale Avenue
Cedar Knolls, NJ 07927

and

Nicole Foley Kraft, Chief
Groundwater Compliance Section
US Environmental Protection Agency, Region 2
290 Broadway, 20th Floor
New York, NY 10007-1866

I would like to thank you and Mr. Eric Williams for your cooperation and assistance during the file review/inspection. If you have any questions, please feel free to contact me at (212) 637-3093 or Amy Vinciguerra of my staff at (212) 637-4245.

Sincerely,

Nicole Foley Kraft, Chief
Groundwater Compliance Section

Enclosures

cc: Karen Fell, NJDEP
Melissa Hornsby, NJDEP
Lisa Tracy, NJDEP-Northern Bureau

West Milford Municipal Utilities Authority
Greenbrook Estates (NJ1615002)

The findings and observations provided below are based on information collected during the on-site file review and inspection of the West Milford Municipal Utilities Authority (WMMUA)-Greenbrook Estates public water system (PWS) which took place June 4-5, 2013. The file review consisted of a review of data and records pertaining to the Safe Drinking Water Act (SDWA) and applicable New Jersey Department of Environmental Protection (NJDEP) drinking water regulations for the compliance period of January 1, 2010 through May 31, 2013.

EPA inspectors Christopher Mecozzi and Amy Vinciguerra and NJDEP inspectors Lisa Tracy, and Alan Dillon met with Eric Williams (Licensed Operator) and Kelly Love (Administrator). Ms. Love provided documentation to the EPA and NJDEP inspectors for their review. Ms. Love and Mr. Williams also discussed the operational status of the WMMUA-Greenbrook Estates PWS with the inspectors.

The WMMUA-Greenbrook Estates PWS (NJ1615002) is classified as a community water system (CWS) serving a population of 600 people. The PWS utilizes three groundwater wells (27, 28, 29). All three wells are treated with sodium hypochlorite for disinfection and zinc orthophosphate for corrosion control. Additionally, Well 27 is treated with potassium permanganate and a calcite filter for iron removal. Well 28 is also treated with lime for pH adjustment. Well 29 was offline at the time of the inspection. Finished water flows to a 250,000-gallon steel water storage tank.

Violations

1. As per N.J.A.C. 7:10-5.1, each treatment system must be operated in accordance with the conditions of the approved construction and operation permit. As noted by Ms. Tracy of NJDEP, Safe Drinking Water Construction Permit No. W-04-99-6075 authorized corrosion control by orthophosphate (Calgon C-9) at Wells 27, 28 and 29. Currently, these wells are treated with zinc orthophosphate (Sterling CP 1236). WMMUA-Greenbrook Estates PWS must notify NJDEP in writing of the treatment change, as a permit modification may be required. The PWS may also request a temporary approval to test a new corrosion control treatment chemical, if applicable.

2. In accordance with N.J.A.C. 7:10-5.2(a)9, a PWS must establish and utilize a sampling pool of targeted sampling sites that meet the monitoring requirements of the Lead and Copper Rule. WMMUA-Greenbrook Estates PWS failed to notify NJDEP of sample site location changes for samples taken in 2010, 2011 and 2012. All lead and copper sample site locations must come from the approved sampling pool.

3. Auxiliary power sources are not available for Wells 27 and 29, as required by N.J.A.C. 7:10-11.6.

Significant Deficiencies

1. At the time of the inspection, EPA inspectors noted that the addition of lime at the GB 28 Well House was continuous, even when the well was not pumping. Chemical addition

should only occur when the well is in operation. In discussions with the operator it was noted that an attempt to stop lime treatment when the well was off resulted in unsatisfactory pH levels. A plan of action must be developed to create a long term treatment solution.

2. During the inspection, EPA personnel noted that a garden hose was connected to the sample taps inside the GB 27 and 29 Well Houses. This is considered a cross connection due to the potential for contamination and must be removed immediately.

Findings/Observations

1. Mr. Williams is the licensed operator (T2/W2). He is responsible for approximately eighteen treatment plants at seven different public water systems, in addition to six wastewater treatment plants. Mr. Williams has a staff of three field personnel who check each treatment facility daily; however, the number and extent of his responsibilities limits his ability monitor the day-to-day operations of the PWS. In addition, although water rates have increased significantly over the past few years, funding does not appear to be sufficient to sustain routine and preventative maintenance.

2. EPA inspectors noted the following data discrepancies in the New Jersey Drinking Water Watch (DWW) database:
    a. The 2012 90^{th} percentile result for lead is incorrectly reported in DWW as 0 mg/l, instead of <0.002 mg/l.
    b. Chlorine residual data is not reported in DWW for the months of April through June 2012.
    c. Corrosivity data from the 2012 secondary monitoring is not reported in DWW.

3. EPA inspectors noted that a detectable disinfectant residual, as defined at N.J.A.C. 7:10-1.3, was not maintained in the distribution system during the following monitoring periods: January 2010, June 2010, November 2010 and January 2011. A chlorine residual of at least 0.05 mg/l should be maintained in the distribution system at all times.

4. WMMUA-Greenbrook Estates PWS exceeded the copper action level during the 2010 monitoring period. A Notice of Violation was issued by NJDEP on October 18, 2010. No action level exceedances occurred during the following three semiannual lead and copper sampling compliance periods. Lead and copper sampling has been reduced to annual, and entry point water quality parameters are analyzed biweekly.

5. The following secondary monitoring results taken on April 12, 2012 were outside the recommended upper limits or optimum range, N.J.A.C. 7:10-7.2:

    a. TP003007
    Iron = 0.433 mg/l
    Manganese = 0.260 mg/l

    b. TP004009
    pH = 5.79 s.u.

6. As per N.J.A.C. 7:10A- 1.12(a)1, the licensed operator must have readily available written, detailed Operation and Maintenance procedures designed to maximize preventative maintenance and operational techniques. EPA inspectors were pleased to note Operation & Maintenance (O&M) manuals at the treatment plants, prepared by Agra Environmental in August 2012. However, the manuals were missing some data and should be verified for accuracy. Additionally, water system personnel did not appear to be familiar with the contents of the O&M manuals. After review and revision of the manuals by the licensed operator, all water system operations staff should be instructed to read the O&M manuals and adhere to the procedures described therein.

7. A finished water storage plan, as required by N.J.A.C. 7:10A- 5.1, is included in the O&M manuals for WMMUA-Greenbrook Estates PWS. At the time of the inspection, EPA inspectors noted that a contractor for WMMUA, Corrpro, had conducted visual evaluations of the Greenbrook Estates water storage tank in 2009, 2011 and 2012. There was no record of any interior or comprehensive tank inspections, as described in the finished water storage plan.

8. EPA inspectors noted during the inspection that the calcite filter at the GB 27 Well House backwashes to a holding tank that overflows to the Municipal Separate Storm Sewer System (MS4). This is an unpermitted discharge to the MS4 and must be eliminated.

9. During the inspection, EPA personnel noted an unmapped concrete vault in the wooded area near the GB 27 Well House. The vault may be connected to the drinking water system and therefore should be explored to see if there is any potential for contamination to the system.

10. During the inspection of the well houses, EPA personnel noted that general housekeeping needs to be improved. The GB 27 Well House had mold on the ceiling as a result of excessive humidity and poor ventilation. A screen was missing from the air pressure relief valve. Unused plastic tubing that may have been part of the chemical injection system should be removed to prevent potential cross-contamination. At the GB 28 Well House, a screen was missing from the air pressure relief valve and the raw water tap was leaking. The zinc orthophosphate pump was in need of repair. There was also significant accumulation of standing water and lime residue on the walls, ceiling and floor of the GB 28 Well House. The lime tank was only partially covered, which introduces the potential for contamination and releases lime particles into the room.

11. During the inspection EPA personnel noted that there was an emergency eye wash inside all three well houses; however, there were no chemical spill kits located at any of the facilities.

Information to be submitted to EPA

Provide information on the actions WMMUA- Greenbrook Estates PWS will take to address the violations, significant deficiencies and findings/observations identified above. Each significant deficiency must include an action plan with deadlines for its correction. An Administrative Order will be received under separate cover to address the violations and identify corrective action required.

West Milford Municipal Utilities Authority
Bald Eagle Village (NJ1615018)

The findings and observations provided below are based on information collected during the on-site file review and inspection of the West Milford Municipal Utilities Authority (WMMUA)-Bald Eagle Village public water system (PWS) which took place June 4-5, 2013. The file review consisted of a review of data and records pertaining to the Safe Drinking Water Act (SDWA) and applicable New Jersey Department of Environmental Protection (NJDEP) drinking water regulations for the compliance period of January 1, 2010 through May 31, 2013.

EPA inspectors Christopher Mecozzi and Amy Vinciguerra and NJDEP inspectors Lisa Tracy, and Alan Dillon met with Eric Williams (Licensed Operator) and Kelly Love (Administrator). Ms. Love provided documentation to the EPA and NJDEP inspectors for their review. Ms. Love and Mr. Williams also discussed the operational status of the WMMUA-Bald Eagle Village PWS with the inspectors.

The WMMUA-Bald Eagle Village PWS (NJ1615018) is classified as a community water system (CWS) serving a population of 1,258. The PWS consists of two groundwater wells, the Quincy Well and the Concord Well. Zinc orthophosphate is added at the Quincy Well House for corrosion control. Water from the Quincy Well then flows to the Concord Well House, where sodium hypochlorite and potassium permanganate are added for disinfection and iron removal, respectively. A greensand/anthracite filtration system is also located at the Concord Well House. Finished water flows to a 300,000-gallon steel water storage tank.

Violations

1. In accordance with N.J.A.C. 7:10-5.2(a)9, a PWS must establish and utilize a sampling pool of targeted sampling sites that meet the monitoring requirements of the Lead and Copper Rule. WMMUA-Bald Eagle Village PWS failed to notify NJDEP of sample site location changes for the 2008-2010 monitoring period. All lead and copper sample site locations must come from the approved sampling pool.

2. EPA inspectors noted that only one Total Coliform sample was taken in March 2010. According to the monitoring schedule for WMMUA-Bald Eagle Village PWS, two Total Coliform samples are required for each monitoring period.

Significant Deficiency

At the time of the inspection, EPA inspectors noted a hose connecting an air relief valve directly to the floor drain at the Quincy Well House. Inspectors also noted a hose connected to the sample tap at the Quincy Well House. These are considered cross connections due to the potential for contamination and must be removed immediately.

Findings/Observations

1. Mr. Williams is the licensed operator (T2/W2). He is responsible for approximately eighteen treatment plants at seven different public water systems, in addition to six wastewater

treatment plants. Mr. Williams has a staff of three field personnel who check each treatment facility daily; however, the number and extent of his responsibilities limits his ability monitor the day-to-day operations of the PWS. In addition, although water rates have increased significantly over the past few years, funding does not appear to be sufficient to sustain routine and preventative maintenance.

2. As per N.J.A.C. 7:10A- 1.12(a)1, the licensed operator must have readily available written, detailed Operation and Maintenance procedures designed to maximize preventative maintenance and operational techniques. EPA inspectors were pleased to note Operation & Maintenance (O&M) manuals at the Concord and Quincy Well Houses, prepared by Agra Environmental in August 2012. However, the manuals were missing some data and should be verified for accuracy. Additionally, water system personnel did not appear to be familiar with the contents of the O&M manuals. After review and revision of the manuals by the licensed operator, all water system operations staff should be instructed to read the O&M manuals and adhere to the procedures described therein.

3. A finished water storage plan, as required by N.J.A.C. 7:10A- 5.1, is included in the O&M manuals for WMMUA-Bald Eagle Village PWS. At the time of the inspection, EPA inspectors noted that a contractor for WMMUA, Corrpro, had conducted visual evaluations of the Bald Eagle Village water storage tank in 2009, 2011 and 2012 and that the tank had been cleaned in April 2013. There was no record of any interior or comprehensive tank inspections, as described in the finished water storage plan.

4. EPA inspectors noted the following data discrepancy in the New Jersey Drinking Water Watch (DWW) database:
    a. Corrosivity data from the 2012 secondary monitoring is not reported in DWW for either of the two treatment plants.

5. EPA inspectors noted that a detectable disinfectant residual, as defined at N.J.A.C. 7:10-1.3, was not maintained in the distribution system during the following monitoring periods: February 2010, June through August 2010, February through March 2011, June through October 2011, September 2012 and April 2013. A chlorine residual of at least 0.05 mg/l should be maintained in the distribution system at all times.

6. The following secondary monitoring results taken on March 15, 2012 were outside the recommended upper limits or optimum range, N.J.A.C. 7:10-7.2:

    a. Concord Well House/TP001002

    Color = 20
    Corrosivity = (-)1.590
    Manganese = 0.226 mg/l
    pH = 6.34 s.u.

7. EPA inspectors noted that zinc orthophosphate was being added at the Quincy Well House prior to filtration at the Concord Well House. At the time of the inspection, the zinc orthophosphate pump was not operational.

8. During the inspection it was noted by EPA personnel that the Bald Eagle Village water storage tank level can only be read by checking the pressure gauge located in a pit or by climbing the tank.

9. During the inspection EPA personnel noted that there was an emergency eye wash inside both of the well houses; however, there were no chemical spill kits located at the facilities.

Information to be submitted to EPA

Provide information on the actions WMMUA-Bald Eagle Village PWS will take to address the violations, significant deficiency and findings/observations identified above. Each significant deficiency must include an action plan with deadlines for its correction. An Administrative Order will be received under separate cover to address the violations and identify corrective action required.

West Milford Municipal Utilities Authority
Awosting (NJ1615012)

The findings and observations provided below are based on information collected during the on-site file review and inspection of the West Milford Municipal Utilities Authority (WMMUA)-Awosting public water system (PWS) which took place June 4-5, 2013. The file review consisted of a review of data and records pertaining to the Safe Drinking Water Act (SDWA) and applicable New Jersey Department of Environmental Protection (NJDEP) drinking water regulations for the compliance period of January 1, 2010 through May 31, 2013.

EPA inspectors Christopher Mecozzi and Amy Vinciguerra and NJDEP inspectors Lisa Tracy and Alan Dillon met with Eric Williams (Licensed Operator) and Kelly Love (Administrator). Ms. Love provided documentation to the EPA and NJDEP inspectors for their review. Ms. Love and Mr. Williams also discussed the operational status of the WMMUA-Awosting PWS with the inspectors.

The WMMUA-Awosting PWS (NJ1615012) is classified as a community water system (CWS) serving a population of 633 people. The PWS consists of four groundwater wells (1, 3, 3A, 4); however, Well 1 was not in use at the time of the inspection. Wells 1 and 4 are treated with sodium hypochlorite and potassium permanganate which is added at TP001001 for disinfection and iron removal, respectively. Wells 1 and 4 also share greensand filtration. Wells 3 and 3A are treated with sodium hypochlorite and zinc orthophosphate which is added at TP002003 for disinfection and corrosion control, respectively. Finished water from both treatment plants flows to a 120,000-gallon ground storage tank.

Violations

1. As per N.J.A.C. 7:10-5.1, each treatment system must be operated in accordance with the conditions of the approved construction and operation permit. As noted by Ms. Tracy of NJDEP, Safe Drinking Water Construction Permit No. W-07-89-4095 authorized iron and manganese sequestration by blended phosphate (Aqua Mag) at TP001001 (Wells 1 and 4). Safe Drinking Water Construction Permit No. W-09-95-5159 authorized iron and manganese sequestration by phosphate feed at TP002003 (Wells 3 and 3A). Currently, zinc orthophosphate (Sterling CP 1236) is used at both treatment plants. WMMUA-Awosting PWS must notify NJDEP in writing of the treatment changes, as permit modifications may be required. The PWS may also request temporary approvals to test a new iron/manganese sequestration treatment chemical, if applicable.

2. In accordance with N.J.A.C. 7:10-5.2(a)9, a PWS must establish and utilize a sampling pool of targeted sampling sites that meet the monitoring requirements of the Lead and Copper Rule. WMMUA-Awosting PWS failed to notify NJDEP of sample site location changes for the 2010-2012 monitoring period. All lead and copper sample site locations must come from the approved sampling pool.

3. Auxiliary power sources are not available at TP001001 (Wells 1 and 4), as required by N.J.A.C. 7:10-11.6.

4. WMMUA-Awosting PWS exceeded the MCL for Total Coliform during the July 2010 compliance period. A Notice of Violation was issued by NJDEP on September 9, 2010.

Significant Deficiencies

1. During the inspection of the water storage tank, EPA inspectors noted several areas in need of maintenance. Multiple vent covers were littered with animal and insect debris. At least two of the manhole frames were broken, creating openings for infiltration. All vent openings need to be cleaned and resealed.

2. At the time of the inspection, a garden hose was connected to the sample tap inside the treatment building for Wells 1 and 4. This is considered a cross connection due to the potential for contamination and must be removed immediately.

Findings/Observations

1. Mr. Williams is the licensed operator (T2/W2). He is responsible for approximately eighteen treatment plants at seven different public water systems, in addition to six wastewater treatment plants. Mr. Williams has a staff of three field personnel who check each treatment facility daily; however, the number and extent of his responsibilities limits his ability monitor the day-to-day operations of the PWS. In addition, although water rates have increased significantly over the past few years, funding does not appear to be sufficient to sustain routine and preventative maintenance.

2. As per N.J.A.C. 7:10A- 1.12(a)1, the licensed operator must have readily available written, detailed Operation and Maintenance procedures designed to maximize preventative maintenance and operational techniques. EPA inspectors were pleased to note Operation & Maintenance (O&M) manuals at the treatment plants, prepared by Agra Environmental in August 2012. However, the manuals were missing some data and should be verified for accuracy. Additionally, water system personnel did not appear to be familiar with the contents of the O&M manuals. After review and revision of the manuals by the licensed operator, all water system operations staff should be instructed to read the O&M manuals and adhere to the procedures described therein.

3. A finished water storage plan, as required by N.J.A.C. 7:10A- 5.1, is included in the O&M manuals for WMMUA-Awosting PWS. There were no records of any inspections of the Awosting water storage tank, as described in the finished water storage plan.

4. EPA inspectors noted the following data discrepancies in the New Jersey Drinking Water Watch (DWW) database:
    a. The 2012 90th percentile result for lead is incorrectly reported in DWW as 0 mg/l, instead of <0.002 mg/l.
    b. Chlorine residual data is not reported in DWW for the months of January through September 2010.
    c. Corrosivity data from the 2012 secondary monitoring is not reported in DWW for either of the two treatment plants.

5. EPA inspectors noted that a detectable disinfectant residual, as defined at N.J.A.C. 7:10-1.3, was not maintained in the distribution system during the following monitoring periods: October through December 2010, February 2011, August 2011, October 2011 and September 2012. A chlorine residual of at least 0.05 mg/l should be maintained in the distribution system at all times.

6. The following secondary monitoring results taken on June 7, 2012 were outside the recommended upper limits or optimum range, N.J.A.C. 7:10-7.2:

   a. TP001001
      Corrosivity = (-)1.643

   b. TP002003
      Aluminum = 0.220 mg/l
      Corrosivity = (-)1.589
      Hardness = 322 mg/l

7. Well 1 is listed as active in New Jersey Drinking Water Watch. Please ensure that its status is updated in the database.

8. EPA inspectors noted that the general housekeeping for TP001001 (Wells 1 and 4) needed improvement. The door on the sodium hypochlorite room does not fully close. The media in the filters has never been replaced, but is thought to be Greensand Plus. Inspectors also noted a hole in the ceiling above the potassium permanganate tank, which is in need of repair. Also, the pressure gauge on Well 3A did not appear to be operational.

9. During the inspection EPA personnel noted that there was an emergency eye wash inside both well houses; however, there were no chemical spill kits located at the facilities.

Information to be submitted to EPA

Provide information on the actions WMMUA- Awosting PWS will take to address the violations, significant deficiencies and findings/observations identified above. Each significant deficiency must include an action plan with deadlines for its correction. An Administrative Order will be received under separate cover to address the violations and identify corrective action required.

West Milford Municipal Utilities Authority
Parkway (NJ1615006)

The findings and observations provided below are based on information collected during the on-site file review and inspection of the WMMUA-Parkway public water system (PWS) which took place June 4-5, 2013. The file review consisted of a review of data and records pertaining to the Safe Drinking Water Act (SDWA) and applicable New Jersey Department of Environmental Protection (NJDEP) drinking water regulations for the compliance period of January 1, 2010 through May 31, 2013.

EPA inspectors Christopher Mecozzi and Amy Vinciguerra and NJDEP inspectors Lisa Tracy and Alan Dillon met with Eric Williams (Licensed Operator) and Kelly Love (Administrator). Ms. Love provided documentation to the EPA and NJDEP inspectors for their review. Ms. Love and Mr. Williams also discussed the operational status of the WMMUA-Parkway PWS with the inspectors.

The WMMUA-Parkway PWS (NJ1615006) is classified as a community water system (CWS) serving a population of 115 people. The PWS utilizes one groundwater well, Parkway Well 16, which is treated with sodium hypochlorite for disinfection. Finished water is stored in a 5,000-gallon hydropneumatic tank.

Violations

1. As per N.J.A.C. 7:19-6.7(b), NJDEP requires a storage capacity of 100 percent of the average daily demand for this system. Based on water usage data, WMMUA-Parkway PWS did not meet the minimum storage capacity requirements in 2011.

2. In accordance with N.J.A.C. 7:10-5.2(a)9, a PWS must establish and utilize a sampling pool of targeted sampling sites that meet the monitoring requirements of the Lead and Copper Rule. WMMUA-Parkway PWS failed to notify NJDEP of sample site location changes for the 2009-2011 monitoring period. All lead and copper sample site locations must come from the approved sampling pool.

Significant Deficiencies

1. At the time of the inspection, EPA personnel noted significant insect/rodent damage to the soffit above the old chlorine gas room at the Parkway Well House. All exterior siding in that location had been removed exposing the insulation and creating access into the well house for insects or small animals. General maintenance needs to be performed to the Parkway Well House building in order to return to compliance.

2. At the time of the inspection, EPA personnel noted that a garden hose was connected to the sample tap inside the Parkway Well House. This is considered a cross connection due to the potential for contamination and must be removed immediately.

Findings/Observations

1. Mr. Williams is the licensed operator (T2/W2). He is responsible for approximately eighteen treatment plants at seven different public water systems, in addition to six wastewater treatment plants. Mr. Williams has a staff of three field personnel who check each treatment facility daily; however, the number and extent of his responsibilities limits his ability monitor the day-to-day operations of the PWS. In addition, although water rates have increased significantly over the past few years, funding does not appear to be sufficient to sustain routine and preventative maintenance.

2. EPA inspectors noted the following data discrepancies in the New Jersey Drinking Water Watch (DWW) database:
    a. Chlorine residual data is not reported in DWW for the months of April through September 2010.
    b. Corrosivity data from the 2012 secondary monitoring is not reported in DWW.

3. EPA inspectors noted that a detectable disinfectant residual, as defined at N.J.A.C. 7:10-1.3, was not maintained in the distribution system during the following monitoring periods: May 2011 and September 2011. A chlorine residual of at least 0.05 mg/l should be maintained in the distribution system at all times.

4. As per N.J.A.C. 7:10A- 1.12(a)1, the licensed operator must have readily available written, detailed Operation and Maintenance procedures designed to maximize preventative maintenance and operational techniques. EPA inspectors were pleased to note Operation & Maintenance (O&M) manuals at the treatment plant, prepared by Agra Environmental in August 2012. However, the manuals were missing some data and should be verified for accuracy. Additionally, water system personnel did not appear to be familiar with the contents of the O&M manuals. After review and revision of the manuals by the licensed operator, all water system operations staff should be instructed to read the O&M manuals and adhere to the procedures described therein.

5. During the inspection WMMUA personnel were unable to start the emergency generator. Auxiliary power sources are required by N.J.A.C. 7:10-11.6.

6. During the inspection EPA personnel noted that there was an emergency eye wash inside the well house; however, there was no chemical spill kit located at the facility.

Information to be submitted to EPA

Provide information on the actions WMMUA-Parkway PWS will take to address the violations, significant deficiencies and findings/observations identified above. Each significant deficiency must include an action plan with deadlines for its correction. An Administrative Order will be received under separate cover to address the violations and identify corrective action required.

West Milford Municipal Utilities Authority
Birch Hill Park (NJ1615001)

The findings and observations provided below are based on information collected during the on-site file review and inspection of the West Milford Municipal Utilities Authority (WMMUA)-Birch Hill Park public water system (PWS) which took place June 24-25, 2013. The file review consisted of a review of data and records pertaining to the Safe Drinking Water Act (SDWA) and applicable New Jersey Department of Environmental Protection (NJDEP) drinking water regulations for the compliance period of January 1, 2010 through May 31, 2013.

EPA inspectors Amy Vinciguerra and Christopher Mecozzi and NJDEP inspectors Lisa Tracy and Linda Ofori met with Kelly Love (Administrator) and Eric Williams (Licensed Operator). Ms. Love provided documentation to the EPA and NJDEP inspectors for their review. Ms. Love and Mr. Williams also discussed the operational status of the WMMUA-Birch Hill Park PWS with the inspectors.

The WMMUA-Birch Hill Park PWS (NJ1615001) is classified as a community water system (CWS) serving a population of 180 people. The PWS consists of four groundwater wells, of which only the two newest (Wells 2 and 2A) are currently in use. Raw water from Wells 2 and 2A is treated for radionuclides by ion exchange at the Marshall Hill Road Well House. Subsequent treatment occurs at the Moore Road Well House, where sodium hypochlorite and zinc orthophosphate are added for disinfection and corrosion control, respectively. Finished water flows to a 90,000-gallon steel water storage tank, also located on Moore Road.

Violations

1. As per N.J.A.C. 7:10-5.1, each treatment system must be operated in accordance with the conditions of the approved construction and operation permit. As noted by Ms. Tracy of NJDEP, Safe Drinking Water Construction Permit No. W-12-01-7049 authorized corrosion control by polyphosphate (SeaQuest) at Wells 1, 1A, 2 and 2A. Currently, these wells are treated with zinc orthophosphate (Sterling CP 1236). WMMUA-Birch Hill Park PWS must provide treatment as permitted or obtain a permit modification from NJDEP. The PWS may also request a temporary approval to test a new corrosion control treatment chemical, if applicable.

2. In accordance with N.J.A.C. 7:10-5.2(a)9, a PWS must establish and utilize a sampling pool of targeted sampling sites that meet the monitoring requirements of the Lead and Copper Rule. WMMUA-Birch Hill Park PWS failed to notify NJDEP of sample site location changes for the 2010-2012 monitoring period. All lead and copper sample site locations must come from the approved sampling pool.

Significant Deficiency

At the Birch Hill Park water storage tank, EPA inspectors noted that the access hatch to the valve chamber was not locked and that sections of the concrete surrounding the access hatch were cracked and crumbling. The July 2012 inspection of the tank by Corrpro also noted that there

was no key for the ladder access lock and that the lock on the top hatch of the tank was rusted open.

Findings/Observations

1. Mr. Williams is the licensed operator (T2/W2). He is responsible for approximately eighteen treatment plants at seven different public water systems, in addition to six wastewater treatment plants. Mr. Williams has a staff of three field personnel who check each treatment facility daily; however, the number and extent of his responsibilities limits his ability monitor the day-to-day operations of the PWS. In addition, although water rates have increased significantly over the past few years, funding does not appear to be sufficient to sustain routine and preventative maintenance.

2. EPA inspectors noted that a detectable disinfectant residual, as defined at N.J.A.C. 7:10-1.3, was not maintained in the distribution system during the following monitoring periods: February 2010, June through August 2010, February through March 2011, June through October 2011, September 2012 and April 2013. A chlorine residual of at least 0.05 mg/l should be maintained in the distribution system at all times.

3. The following secondary monitoring result taken on April 12, 2012 was outside the recommended upper limit or optimum range, N.J.A.C. 7:10-7.2:

   Moore Road Well House/TP001002
   Hardness = 363 mg/l

4. As per N.J.A.C. 7:10A- 1.12(a)1, the licensed operator must have readily available written, detailed Operation and Maintenance procedures designed to maximize preventative maintenance and operational techniques. EPA inspectors were pleased to note Operation & Maintenance (O&M) manuals at the Marshall Hill Road and the Moore Road Well Houses, prepared by Agra Environmental in August 2012. However, the manuals were missing some data and should be verified for accuracy. Additionally, water system personnel did not appear to be familiar with the contents of the O&M manuals. After review and revision of the manuals by the licensed operator, all water system operations staff should be instructed to read the O&M manuals and adhere to the procedures described therein.

5. A finished water storage plan, as required by N.J.A.C. 7:10A- 5.1, is included in the O&M manuals for WMMUA-Birch Hill Park PWS. At the time of the inspection, EPA inspectors noted that a contractor for WMMUA, Corrpro, had conducted visual evaluations of the Birch Hill Park water storage tank in 2009, 2011 and 2012. There was no record of any interior or comprehensive tank inspections, as described in the finished water storage plan.

6. At the Moore Road Treatment Building, EPA inspectors noted that there was no chemical spill kit located at the facility. Additionally, Mr. Williams noted that Well 1A is no longer operable; however, Well 1A is listed as active in New Jersey Drinking Water Watch. Please ensure that Well 1A is properly sealed and that its status is changed in the database.

Information to be submitted to EPA

Provide information on the actions WMMUA-Birch Hill Park PWS will take to address the violations, significant deficiency and findings/observations identified above. Each significant deficiency must include an action plan with deadlines for its correction. An Administrative Order will be received under separate cover to address the violations and identify corrective action required.

West Milford Municipal Utilities Authority
Crescent Park (NJ1615014)

The findings and observations provided below are based on information collected during the on-site file review and inspection of the West Milford Municipal Utilities Authority (WMMUA)-Crescent Park public water system (PWS) which took place June 24-25, 2013. The file review consisted of a review of data and records pertaining to the Safe Drinking Water Act (SDWA) and applicable New Jersey Department of Environmental Protection (NJDEP) drinking water regulations for the compliance period of January 1, 2010 through May 31, 2013.

EPA inspectors Amy Vinciguerra and Christopher Mecozzi and NJDEP inspectors Lisa Tracy and Linda Ofori met with Kelly Love (Administrator) and Eric Williams (Licensed Operator). Ms. Love provided documentation to the EPA and NJDEP inspectors for their review. Ms. Love and Mr. Williams also discussed the operational status of the WMMUA-Crescent Park PWS with the inspectors.

The WMMUA-Crescent Park PWS (NJ1615014) is classified as a community water system (CWS) serving a population of 700 people. The PWS consists of three groundwater wells, one of which has never been used. The two active wells are the Morris (Well 12), located on Morris Avenue, and the Sussex (Well 13), located on Sussex Drive. Treatment at the Morris and Sussex Wells is identical, consisting of sodium hypochlorite for disinfection and zinc orthophosphate for corrosion control. Finished water flows to a 108,000-gallon steel water storage tank, located off of Sussex Drive.

Violations

1. As per N.J.A.C. 7:10-5.1, each treatment system must be operated in accordance with the conditions of the approved construction and operation permit. As noted by Ms. Tracy of NJDEP, Safe Drinking Water Construction Permit No. W-04-99-6089 authorized corrosion control by orthophosphate (Calgon C-9) at Wells 12 and 13. Currently, these wells are treated with zinc orthophosphate (Sterling CP 1236). WMMUA-Crescent Park PWS must notify NJDEP in writing of the treatment change, as a permit modification may be required. The PWS may also request a temporary approval to test a new corrosion control treatment chemical, if applicable.

2. In accordance with N.J.A.C. 7:10-5.2(a)9, a PWS must establish and utilize a sampling pool of targeted sampling sites that meet the monitoring requirements of the Lead and Copper Rule. WMMUA-Crescent Park PWS failed to notify NJDEP of sample site location changes for the 2010-2012 monitoring period. All lead and copper sample site locations must come from the approved sampling pool.

3. Auxiliary power sources are not available for the WMMUA-Crescent Park PWS, as required by N.J.A.C. 7:10-11.6.

Significant Deficiencies

1. The July 2012 inspection of the Crescent Park water storage tank by Corrpro noted that there was no key allowing access to the tank and the air vent was not completely screened.

2. The unused well near the Crescent Park water storage tank must be properly sealed, as per N.J.A.C. 7:10-11.6(j).

Findings/Observations

1. Mr. Williams is the licensed operator (T2/W2). He is responsible for approximately eighteen treatment plants at seven different public water systems, in addition to six wastewater treatment plants. Mr. Williams has a staff of three field personnel who check each treatment facility daily; however, the number and extent of his responsibilities limits his ability monitor the day-to-day operations of the PWS. In addition, although water rates have increased significantly over the past few years, funding does not appear to be sufficient to sustain routine and preventative maintenance.

2. EPA inspectors noted the following data discrepancies in the New Jersey Drinking Water Watch (DWW) database:
   a. The 2012 90th percentile result for lead is incorrectly reported in DWW as 0 mg/l, instead of <0.002 mg/l.
   b. Corrosivity data from the 2012 secondary monitoring is not reported in DWW.

3. EPA inspectors noted that a detectable disinfectant residual, as defined at N.J.A.C. 7:10-1.3, was not maintained in the distribution system during the following monitoring periods: June 2010, November 2010 and November 2012. A chlorine residual of at least 0.05 mg/l should be maintained in the distribution system at all times.

4. The following secondary monitoring results taken on May 3, 2012 were outside the recommended upper limits or optimum range, N.J.A.C. 7:10-7.2:

   a. Morris Avenue/TP001001
      pH = 5.8 s.u.
      Corrosivity = (-)3.172
      Aluminum = 0.307 mg/l

   b. Sussex Drive/TP002003
      pH = 6 s.u.
      Corrosivity = (-)3.166

5. As per N.J.A.C. 7:10A- 1.12(a)1, the licensed operator must have readily available written, detailed Operation and Maintenance procedures designed to maximize preventative maintenance and operational techniques. EPA inspectors were pleased to note Operation & Maintenance (O&M) manuals at the Morris Avenue and Sussex Drive Well Houses, prepared by Agra Environmental in August 2012. However, the manuals were missing some data and

should be verified for accuracy. Additionally, water system personnel did not appear to be familiar with the contents of the O&M manuals. After review and revision of the manuals by the licensed operator, all water system operations staff should be instructed to read the O&M manuals and adhere to the procedures described therein.

6. A finished water storage plan, as required by N.J.A.C. 7:10A- 5.1, is included in the O&M manuals for WMMUA-Crescent Park PWS. At the time of the inspection, EPA inspectors noted that a contractor for WMMUA, Corrpro, had conducted a visual evaluation of the Crescent Park water storage tank in 2009, 2011 and 2012. There was no record of any interior or comprehensive tank inspections, as described in the finished water storage plan.

7. Monthly Operator Reports routinely show negative flow for the Morris Avenue Well for the compliance period reviewed.

8. EPA inspectors noted a hole in the ceiling of the Sussex Drive Well House, which is in need of repair. Excessive moisture and corrosion of some interior components were also noted. Installation of a ventilation system may help with humidity and subsequent corrosion.

Information to be submitted to EPA

Provide information on the actions WMMUA-Crescent Park PWS will take to address the violations, significant deficiencies and findings/observations identified above. Each significant deficiency must include an action plan with deadlines for its correction. An Administrative Order will be received under separate cover to address the violations and identify corrective action required.

West Milford Municipal Utilities Authority
Olde Milford Estates (NJ1615016)

The findings and observations provided below are based on information collected during the on-site file review and inspection of the WMMUA-Olde Milford Estates public water system (PWS) which took place June 24-25, 2013. The file review consisted of a review of data and records pertaining to the Safe Drinking Water Act (SDWA) and applicable New Jersey Department of Environmental Protection (NJDEP) drinking water regulations for the compliance period of January 1, 2010 through May 31, 2013.

EPA inspectors Amy Vinciguerra and Christopher Mecozzi and NJDEP inspectors Lisa Tracy and Linda Ofori met with Kelly Love (Administrator) and Eric Williams (Licensed Operator). Ms. Love provided documentation to the EPA and NJDEP inspectors for their review. Ms. Love and Mr. Williams also discussed the operational status of the WMMUA-Olde Milford Estates PWS with the inspectors.

The WMMUA-Olde Milford Estates PWS (NJ1615016) is classified as a community water system (CWS) serving a population of 1,622 people. The PWS consists of eight groundwater wells and six treatment plants. All wells are treated with sodium hypochlorite for disinfection. Wells 5 and 6, located at 247 Ridge Road, are also treated with potassium permanganate and greensand filtration for iron and manganese removal. Finished water is stored in three steel storage tanks: Highview (215,000 gallons), Ridge Road (214,000 gallons) and Rolling Ridge Road (270,000 gallons). Other distribution system components include an emergency interconnection with Passaic Valley Water Commission Post Brook Water System (NJ1615008) and two booster pump stations.

Violations

1. In accordance with N.J.A.C. 7:10-5.2(a)9, a PWS must establish and utilize a sampling pool of targeted sampling sites that meet the monitoring requirements of the Lead and Copper Rule. WMMUA-Olde Milford Estates PWS failed to notify NJDEP of sample site location changes for the 2010-2012 monitoring period. All lead and copper sample site locations must come from the approved sampling pool.

2. WMMUA-Olde Milford Estates PWS exceeded the MCL for Total Coliform during the August 2011 compliance period. A Notice of Violation was issued by NJDEP on August 8, 2011.

3. WMMUA-Olde Milford Estates PWS failed to monitor for Total Trihalomethanes (TTHM) and Haloacetic Acids (HAA5) during the 2009-2011 compliance period. Notices of Violation were issued by NJDEP on February 15, 2012.

Significant Deficiencies

1. The Ridge Road water storage tank was last inspected in 2009 (visual only). The inspection report indicated that the condition of the tank's center support column is in need of further

evaluation. At the time of the inspection, EPA inspectors also noted that the ladder access was open and unsecured.

2. The Rolling Ridge Road water storage tank was last inspected in 2009 (visual only). The inspection report noted the foundation needed caulking, no security on the ladder, and no lock on the top hatch. At the time of the inspection, EPA inspectors also noted rust around the base of the tank, tree branches in contact with the tank, and cracks in the concrete access hatch to the valve chamber.

3. According to the July 2012 inspection of the Highview water storage tank by Corrpro, the tank's interior coating shows signs of failure.

Findings/Observations

1. Mr. Williams is the licensed operator (T2/W2). He is responsible for approximately eighteen treatment plants at seven different public water systems, in addition to six wastewater treatment plants. Mr. Williams has a staff of three field personnel who check each treatment facility daily; however, the number and extent of his responsibilities limits his ability monitor the day-to-day operations of the PWS. In addition, although water rates have increased significantly over the past few years, funding does not appear to be sufficient to sustain routine and preventative maintenance.

2. EPA inspectors noted the following data discrepancies in the New Jersey Drinking Water Watch (DWW) database:
    a. Corrosivity data from the 2012 secondary monitoring is not reported in DWW for any of the six treatment plants.
    b. Radionuclide data from the 2007-2012 monitoring period is not reported in DWW for 22 Rolling Ridge Road (TP001004).
    c. Radionuclide data for the first and second quarters of 2012 is not reported in DWW for 22 Eagle Rock Road (TP002007).

3. EPA inspectors noted that a detectable disinfectant residual, as defined at N.J.A.C. 7:10-1.3, was not maintained in the distribution system during the following monitoring periods: July 2010, November 2010, May 2011, and July-August 2011. A chlorine residual of at least 0.05 mg/l should be maintained in the distribution system at all times.

4. The following secondary monitoring results taken in 2012 were outside the recommended upper limits or optimum range, N.J.A.C. 7:10-7.2:

    a. 247 Ridge Road/TP005018
    Manganese = 0.091 mg/l
    Corrosivity = (-)1.37

    b. 22 Rolling Ridge Road/TP001004
    pH = 6.45 s.u.
    Corrosivity = (-)1.550

c. 22 Eagle Rock Road/TP002007
Hardness = 308 mg/l

d. 88 Rolling Ridge Road/TP003010
pH = 6.25 s.u.
Corrosivity = (-)1.881

e. 1355 Macopin Road (Highview)/TP007030
Corrosivity = (-)1.244

5. As per N.J.A.C. 7:10A- 1.12(a)1, the licensed operator must have readily available written, detailed Operation and Maintenance procedures designed to maximize preventative maintenance and operational techniques. EPA inspectors were pleased to note Operation & Maintenance (O&M) manuals at the treatment plants, prepared by Agra Environmental in August 2012. However, the manuals were missing some data and should be verified for accuracy. Additionally, water system personnel did not appear to be familiar with the contents of the O&M manuals. After review and revision of the manuals by the licensed operator, all water system operations staff should be instructed to read the O&M manuals and adhere to the procedures described therein.

6. A finished water storage plan, as required by N.J.A.C. 7:10A- 5.1, is included in the O&M manuals for WMMUA-Olde Milford Estates PWS. At the time of the inspection, EPA inspectors noted that a contractor for WMMUA, Corrpro, had conducted visual evaluations of the Highview water storage tank in 2009, 2011 and 2012. Visual evaluations of the Ridge Road and Rolling Ridge Road water storage tanks were last completed in 2009. There was no record of any interior or comprehensive tank inspections, as described in the finished water storage plan.

7. The generator at Well 7 (TP004012) did not operate at the time of the inspection. The Continental Road booster pump station also did not have auxiliary power, as required by N.J.A.C. 7:10-11.6.

8. EPA inspectors noted a hole in the wall/ceiling of the Highview treatment plant (TP007030), which is in need of repair. Excessive moisture and corrosion of some interior components were also noted. Installation of a ventilation system may help with humidity and subsequent corrosion.

9. EPA inspectors noted some rotting of the soffits at the Well 7 (TP004012) treatment building. Also, excessive vegetation around the building should be removed.

10. EPA inspectors noted excessive moisture and mold on the ceiling of the treatment building at 247 Ridge Road (TP005018). Installation of a ventilation system may help with humidity and mold issues. Additionally, the flow meter should be checked for accuracy.

11. As noted by Ms. Tracy of NJDEP, the water main extension serving the ten homes in the Village on Ridge development is unpermitted.

Information to be submitted to EPA

Provide information on the actions WMMUA-Olde Milford Estates PWS will take to address the violations, significant deficiencies and findings/observations identified above. Each significant deficiency must include an action plan with deadlines for its correction. An Administrative Order will be received under separate cover to address the violations and identify corrective action required.